## Notes on the Birth and Growth of Horned Lizards

On July 25, 1942 Mr. Wilmer W. Tanner collected a female horned lizard, *Phrynosoma douglassii ornatum* Girard, at Indianola, Sanpete Co., Utah. This is 38 miles southeast of Provo on Thistle Creek, a tributary of the Spanish Fork River, which flows into Utah Lake. This specimen which was given to the writer, was placed in a glass jar in the laboratory on July 31. It was kept under observation until the afternoon of August 7, when I saw some little lizards moving around, some of them on the back of the mother lizard. I counted seven young and within a half hour the eighth one was born.

Professor H. J. Pack <sup>(1)</sup> in 1916 collected several female horned lizards west of Salt Lake City, which he kept in cages. On August 14th, two females had given birth to living young and another one on August 16th.

These records agree with field observations that have been made for the past twenty years; namely that the horned lizards of this area gives birth to living young during the late summer and early fall months and that the young lizards do some feeding, doubling or trebling their weight before hibernation.

For the purpose of determining, in a general way, the rate of growth of the young, during the first year, the eight little lizards were weighed 15 hours after birth. The results are shown as follows:

No. 1	0.60 of a gram	No. 5 0.50 of a gram
No. 2	0.82 of a gram	No. 6 0.75 of a gram
No. 3	0.90 of a gram	No. 7 0.76 of a gram
No. 4	0.80 of a gram	No. 8 0.79 of a gram
		Total 5.92 grams

The female weighed 13 grams after the birth of the young.

The following are the weights of 12 young specimens of this same species collected at the Desert Experiment Station, 50 miles west of Milford, Beaver Co., Utah, on September 4, 1937, by the writer.

No. 1	2.00 grams	No. 7	1.80 grams
No. 2	2.00 grams	No. 8	1.65 grams
No. 3	3.00 grams	No. 9	2.00 grams
No. 4	2.20 grams	No. 10	1.55 grams
No. 5	2.15 grams	No. 11	1.55 grams
No. 6	2.10 grams	No. 12	1.60 grams

These specimens, no doubt, belonged to a number of litters, as they were collected within a radius of two to three miles of the station. I am also of the opinion that they were more or less than four weeks old and that they had in this time doubled to trebled their weight. An examination of the stomachs of the above specimens shows that their food consisted of ants, in the main (95%). At least three species were common in the diet; one of these being *Pogonomyrmex barbates* var. One stomach contained two specimens of *Blapstinus* sp.—V. M. T.

(1) H. J. Pack, Copeia, No. 63, Nov. 21, 1918. pp. 91-92.